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(19)日本国特許庁(J P)

(12) 公開実用新案公報 (U)

(11)実用新案出願公開番号

実開平6-49220

(43)公開日 平成6年(1994)7月5日

(51)Int.Cl.⁵

B 6 0 R 11/00
11/02

識別記号

庁内整理番号

8012-3D
C 8012-3D

F I

技術表示箇所

審査請求 未請求 請求項の数 1 (全 2 頁)

(21)出願番号 実願平4-86638

(22)出願日 平成4年(1992)12月17日

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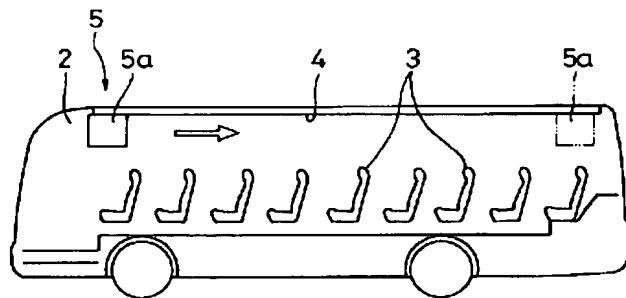
(74)代理人 弁理士 長門 侃二

(54)【考案の名称】 搬送ケース

(57)【要約】

【目的】 バスの車内に装備されるテレビジョン受信機等の乗客サービス備品及び物品を簡単にバスの前後方向に搬送し得る搬送ケースを提供することを目的とする。

【構成】 バス2の天井の略中央に前部から後部に亘り設けられたレール4と、レール4に移動可能に吊り下げられた収納ケース5aと、レール4と収納ケース5aとの間に設けられて当該収納ケース5aを移動させる駆動手段とを設けた。



1

2

【実用新案登録請求の範囲】

【請求項1】 バスの天井の略中央に前部から後部に亘り設けられたレールと、前記レールに移動可能に吊り下げられた収納ケースと、前記レールと前記収納ケースとの間に設けられて当該収納ケースを移動させる駆動手段とを備えたことを特徴とする搬送ケース。

【図面の簡単な説明】

【図1】 本発案に係る搬送ケースを設けたバス車内を示す側面図である。

【図2】 図1の平面図である。

【図3】 図1の搬送ケースにテレビジョン受信機を収納した状態を示す正面図である。

【図4】 図1の搬送ケースの位置による前方視界の差異を示す図である。

* 【図5】 図1の搬送ケースの他の実施例を示す斜視図である。

【図6】 従来のバスに搭載された乗客用テレビジョン受信機の配置を示す図である。

【符号の説明】

1 テレビジョン受信機

2 バス

4 レール

5 搬送ケース

10 5 a 収納ケース

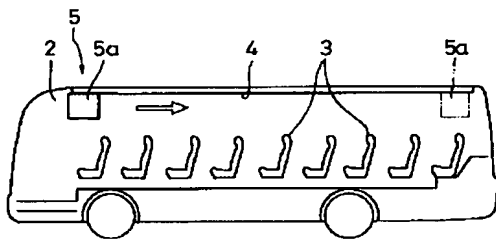
5 b 支柱

5 c 車軸

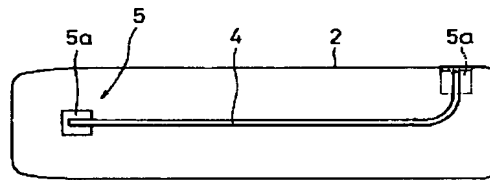
5 d 車輪

* 5 e モータ

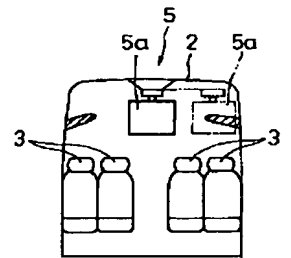
【図1】



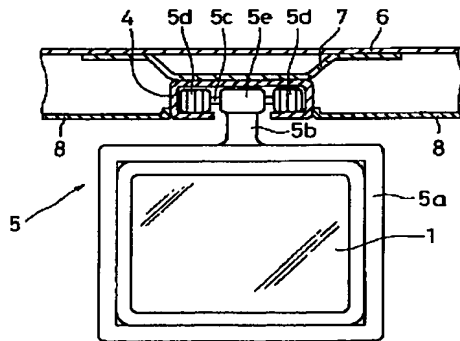
【図2】



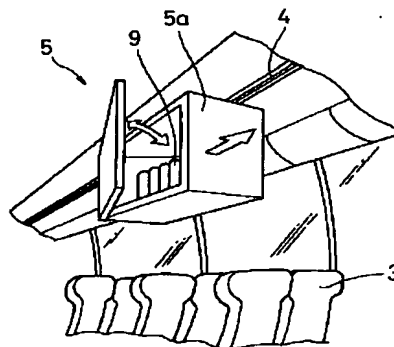
【図4】



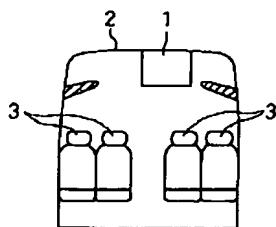
【図3】



【図5】



【図6】



【考案の詳細な説明】**【0001】****【産業上の利用分野】**

本考案は、バスの車内に装備されるテレビジョン受信機、温冷蔵庫等の乗客サービス用備品及び乗客用飲食物等の物品を車内前後に移動するための搬送ケースに関する。

【0002】**【従来技術】**

従来、観光バス等の車内に装備される乗客サービス用備品としてテレビジョン受信機がある。このテレビジョン受信機1は、図6に示すように、バス2の運転席上方位置に固定されており、シート3に着座した乗客が着座したままの姿勢でテレビ画像を見ることができるようになっている。

【0003】**【考案が解決しようとする課題】**

ところで、上記テレビジョン受信機1は、運転席上方に固定されているため、上映されていないときには乗客にとって煩わしい存在である場合が多い。特に、乗客の着座位置によっては前方視界が妨げられる。

本考案は、上述事情に鑑みてなされたもので、バスの車内に装備されるテレビジョン受信機等の乗客サービス用物品を簡単にバスの前後方向に移動し得る搬送ケースを提供することを目的とする。

【0004】**【課題を解決するための手段】**

上記目的を達成するため本考案によれば、バスの天井の略中央に前部から後部に亘り設けられたレールと、レールに移動可能に吊り下げられた収納ケースと、レールと収納ケースとの間に設けられて当該収納ケースを移動させる駆動手段とを備えた構成としたものである。

【0005】**【作用】**

搬送ケースは、駆動手段によってバスの天井に設けられたレールに沿って車内

を移動し、収納ケースに収納した物品をバスの前方向又は後方向に搬送する。

【0006】

【実施例】

以下、本考案の一実施例を添付図面に基づき説明する。

図1及び図2は本考案の搬送ケースを示し、バス2の天井の略中央部に設けられたレール4に搬送ケース5の収納ケース5aが移動可能に吊り下げられている。バス2の天井のインナーパネル6の中央部には、図3に示すように、レール取付用のブラケット7がバス2の前部から後部にかけて所定の間隔で複数個設けられており、これらのブラケット7には、断面が偏平なC字状をなす長尺のレール4がその開口部を下方に向けてシート3の最前列から最後列に亘り固設されている。

【0007】

搬送ケース5は、例えば、テレビジョン受信機1を収納することのできる収納ケース5aを備えており、収納ケース5aの上面の中央には、支柱5bが固定されている。この支柱5bの上端には、車軸5cが回転可能に軸支されており、車軸5cの両側には、タイヤ付きの車輪5d、5dが取付けられている。また、車軸5cには、ブレーキ付きのモータ5eが減速機構を介して連結されており、モータ5eの駆動によって車軸5cと車輪5d、5dが回転する。車輪5d、5dは、レール4に収納されており、これにより、収納ケース5aがテレビジョン受信機1の画面を乗客に向けて、レール4に吊り下げられるようになっている。

【0008】

また、レール4と車軸5cとの間には、集電装置（図示せず）が設けられており、最前列のシート3近傍に配置されたスイッチの操作によってモータ5eを正方向又は逆方向に制御可能とされている。なお、レール4の取付け部は、車内の見栄えを損なわないように天井用トリム8によって覆われている。

搬送ケース5は以上のように構成されており、以下のように作動する。

【0009】

テレビジョン受信機1を収納した収納ケース5aは、テレビが上映される際、図1、図2及び図4の実線にて示す、運転席上方の上映位置に移動される。そし

て、上映が終了した後前記スイッチが操作されると、モータ5 eが正回転して、車軸5 cの両側に取付けられたタイヤ付きの車輪5 d、5 dが回転し、レール4の内をバスの後方に向かって走行し、レール4に吊り下げられた収納ケース5 aが前記テレビ上映位置から後部の図1及び図2の二点鎖線にて示す退避位置に移動する。これにより、収納ケース5 aに収納されたテレビジョン受信機1は、乗客の視界の邪魔にならないバス後部の図4の二点鎖線に示す位置に移動される。

【0010】

また、テレビを上映する際には、テレビジョン受信機1を上映位置に移動すべく前記スイッチが操作されると、モータ5 eが逆回転して車輪5 d、5 dがバスの前方に向かって走行し、収納ケース5 aが図1及び図2の二点鎖線にて示すバス後部の前記退避位置から前部の図1及び図2の実線にて示す、テレビ上映位置に移動する。

【0011】

なお、上述実施例においてバス乗客用のテレビジョン受信機1を移動する搬送ケース5について説明したが、上述テレビジョン受信機1に限らず、他の例えば、乗客サービス用の温冷蔵庫を収納するようにしてもよく、前記温冷蔵庫に収納した物品を例えば、図5に示すように、冷やした罐ビール9等を適宜各シート3に着座する乗客に配ることができる。また、温冷蔵庫が設置されていたスペースが不要になって、車内のスペースを拡大させる効果もある。

【0012】

【考案の効果】

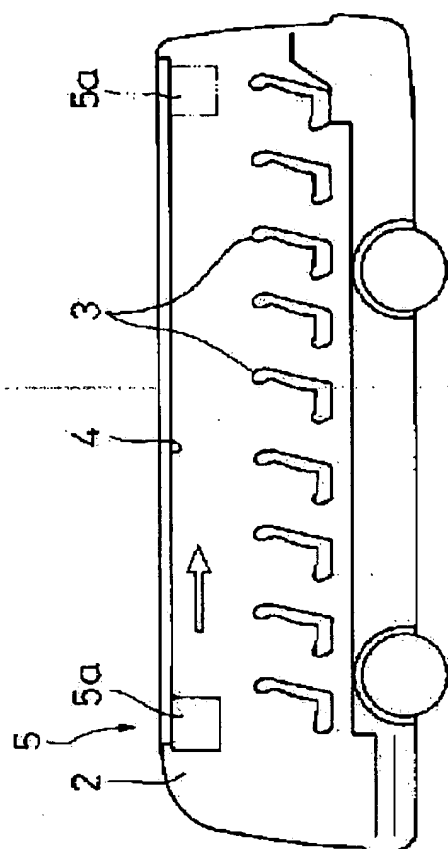
以上説明したように本考案によれば、バスの天井の略中央に前部から後部に亘り設けられたレールと、レールに移動可能に吊り下げられた収納ケースと、レールと収納ケースとの間に設けられて当該収納ケースを移動させる駆動手段とを備えた構成としたので、従来バスの車内の一定の場所に固定して配置されたテレビジョン受信機等の乗客サービス用備品又は乗客飲食物等の物品をバスの車内を前後に簡単に移動することができる。このため、乗客サービス用備品による乗客の視界障害を解消し、また乗客サービス用備品の利便性を向上させることができる。また、乗客用飲食物等の物品を各乗客に簡単に配ることもできる。

Searching by Document Number

** Result [Utility-model] ** Format(P803) 09.Oct.2003 1/ 1

Application no/date: 1992- 86638 [1992/12/17]
Date of request for examination: [1996/03/13]
Public disclosure no/date: 1994- 49220 [1994/07/05] **¥ Translate**
Examined publication no/date (old law): []
Registration no/date: 2574250 [1998/03/27] **¥ Translate**
Examined publication date (present law): [1998/06/11]
PCT application no
PCT publication no/date []
Applicant: MITSUBISHI MOTORS CORP
Inventor: NAKAGAWA MASAHIRO
IPC: B60R 11/00 B60R 11/02
FI: B60R 11/00 B60R 11/02 C
F-term: 3D020BA01,BA05,BB02,BC04,BD01,BD02,BD09
Expanded classification: 262
Fixed keyword:
Citation: [19,1997.10.30,04] (04,JP, Unexamined Publication of Utility Model
Unexamined Publication of Utility Model,S57-72584)
Title of invention: Transportation case
Abstract:

SUMMARY:Because a drive means it was displaceable, and rail and the
rail which rear was lasted for from front, and was installed in generally
center of ceiling of bath were installed in between hung storing case
and rail and storing case, and to move the storing case was comprised,
it can easily move in equipment for passenger service of the television
receiver which it is fixed to constant locality in a wheel of before
bath, and is disposed or article of passenger food and drink after
in front of in the inside of car of bath.
(Machine Translation)



Priority country/date/number: () [] ()
 Classification of examiners decision/date: (decision of registration(allowance)) [1
 Final examinal transaction/date: (registration) [1998/03/27]
 Examination intermediate record:
 (A63 1992/12/17,PATENT APPLICATION UTILITY MODEL REGISTRATION APPLICATION,11000
 (A961 1993/ 2/18,CORRECTION DATA BY EX OFFICIO (FORMALITY), :)
 (A621 1996/ 3/13,WRITTEN REQUEST FOR EXAMINATION,48000:)
 (A961 1996/ 4/16,CORRECTION DATA BY EX OFFICIO (FORMALITY), :)
 (A9710071997/10/13,WRITTEN REPORT OF RETRIEVAL, :)
 (A9710111997/10/30,SITUATION LIST OF UTILIZATION OF OUTSIDE AGENCY FOR SEARCHING P
 (A131 1997/11/11,WRITTEN NOTICE OF REASON FOR REJECTION, :)
 (A53 1998/ 1/ 9,WRITTEN OPINION, :)
 (A523 1998/ 1/ 9,WRITTEN AMENDMENT, :)

(A961 1998/ 2/ 3,CORRECTION DATA BY EX OFFICIO (FORMALITY), :)
(A961 1998/ 2/ 3,CORRECTION DATA BY EX OFFICIO (FORMALITY), :)
(A01 1998/ 2/24,DECISION TO GRANT A PATENT DECISION OF REGISTRATION, :)
(A61 1998/ 3/ 9,PAYMENT OF ANNUAL FEE, :)

*** Trial no/date [] Kind of trial [] ***
Demandant: -
Defendant: -
Opponent: -
Classification of trial decision of opposition/date: () []
Final disposition of trial or appeal/date: () []
Trial and opposition intermediate record:

Registration intermediate record:

(R01 1998/ 2/24,A NOTICE OF DECISION OF REGISTRATION, :01)
(R1001 1998/ 3/ 9,A WRITTEN PAYMENT FOR ESTABLISHMENT (COMPREHENSIVE PAYMENT),
(R151 1998/ 4/ 7,A NOTICE OF REGISTRATION, :01)

Amount of annuities payment: 3years year

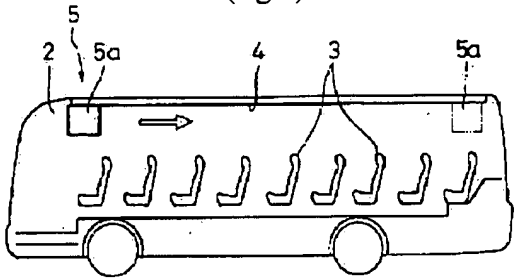
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Proprietor: 13-MITSUBISHI MOTORS CORP

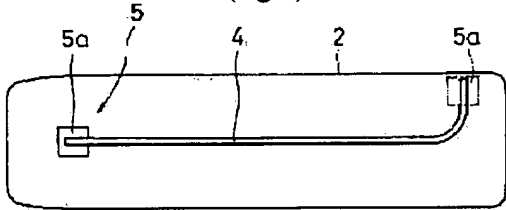
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Other Drawings...

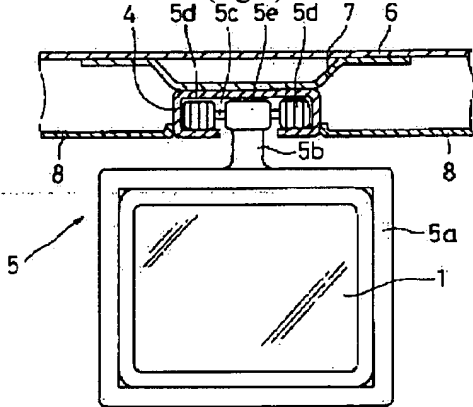
(fig.1)



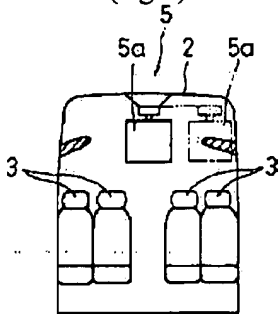
(fig.2)



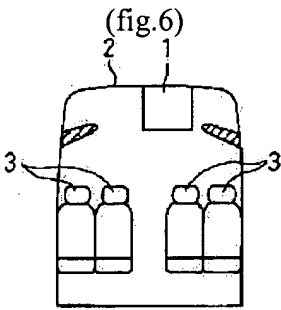
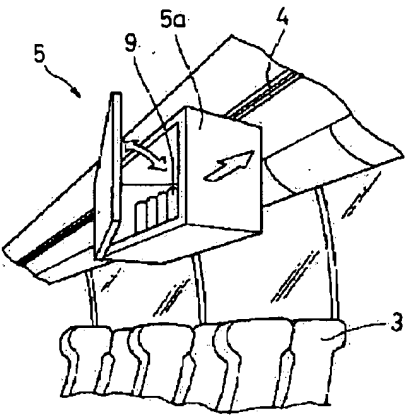
(fig.3)



(fig.4)



(fig.5)



(57)

[ABSTRACT]

[PURPOSE]

It is directed to that the transportation case that cross direction of bath can easily transport passenger service equipment of television receiver equipped in the inside of car of bath and article is provided.

[CONSTITUTION]

A drive means it was displaceable, and rail 4 which rear was lasted for from front, and was installed in generally center of ceiling of bath 2 and rail 4 were installed in between hung storing case 5a and rail 4 and storing case 5a, and to move storing case 5a was established.

[CLAIM FOR THE UTILITY MODEL REGISTRATION]

[Claim 1]

Transportation case; comprising: The rail which it lasted, and was generally installed in rear centrally from front of ceiling of bath, The storing case which said rail could be moved to, and was hung, A drive means it is installed between said rail and said storing case, and to move said storing case.

[BRIEF DESCRIPTION OF DRAWINGS]

[FIG. 1]

It is the profile which o shows the bath inside of car that made transportation case concerning the present invention in.

[FIG. 2]

It is alignment of FIG. 1.

[FIG. 3]

It is elevation to show the condition that put away television receiver in transportation case of FIG. 1 in.

[FIG. 4]

It is figure to show contrast of front visibility by lay of transportation case of FIG. 1 in.

[FIG. 5]

It is a perspective diagram showing embodiment other than transportation case of FIG. 1.

[FIG. 6]

It is figure to show an arrangement of television receiver for passengers carried by conventional bath in.

[DENOTATION OF REFERENCE NUMERALS]

1 Television receiver 2 Bath 4 Rail 5 Transportation case 5a Storing case 5b Brace 5c An axle 5d Wheel 5e A motor

[DETAILED DESCRIPTION OF THE INVENTION]

[0001]

[INDUSTRIAL APPLICATION FIELD]

Passenger *sa*.such.as.the television receiver.that the present invention is equipped in the inside of car of bath, *on* cold storage Transportation case to move equipment for *bisu* and article of food and drink for passengers after in front of inside of car It is similar, and it *sekisuru*.

[0002]

[PRIOR ART]

It is television as equipment for passenger service equipped conventionally in the inside of car of sight-seeing bus There is receiver. This television receiver 1 is maneuvering of bath 2 as shown in FIG. 6 Is fixed to one lay in a seat, in the position which the passenger who seated to seat 3 seated A television picture gets possible to be watched.

[0003]

[PROBLEM TO BE SOLVED BY THE INVENTION]

In a place, So that television receiver 1 is fixed to driver's seat top, When it is not shown, there are many cases that are the existence which is troublesome for a passenger. In particular, Front visibility is disturbed by seating lay of a passenger. The television which is equipped with the thing which the present invention takes warning by statement above circumstances, and was done in the inside of car of bath The transportation that can easily move article for passenger service of John receiver in cross direction of bath It is aimed at offering case.

[0004]

[MEANS TO SOLVE THE PROBLEM]

According to the present invention, it is rear in generally center of ceiling of bath from front to achieve the object The storing case which rail and the rail which it was similar, and it *ri, and was installed in could be moved to, and was hung, A drive means it is installed between rail and storing case, and to move the storing case o was done with assembling prepared for.

[0005]

[OPERATION]

Transportation case is the inside of car in consonance with rail installed in ceiling of bath by means of a drive means o moves, article put away in storing case is transported in direction or rear direction before bath.

[0006]

[EXAMPLE]

As follows, One embodiment of the present invention is explained based on accompanying drawing. Figure 1 and figure 2 show transportation case of the present invention, in generally central part of ceiling of bath 2, setting up Storing case 5a of transportation case 5 can move to *reta* rail 4, and it is hung B In central part of inner control panel 6 of ceiling of bath 2, it is rail *tori* as shown in FIG. 3 In the distance that bracket 7 of the business dated is appointed from front of bath 2 to rear, multiple pieces setting up Rail of eggplant lengthiness of a reel of film or tape to have a configuration of the C character that cross section is flat to *rete* occasion, these bracket 7 4 turns the opening underneath, and the last line is lasted for, and it is anchored by the first line of seat 3 *ru*.

[0007]

The storing that transportation case 5 can receive, for example, television receiver 1 Case 5a is comprised , in center of top of storing case 5a, brace 5b is anchoring *sa* There is *rete*. At the upper end of this brace 5b, axle 5c is jikushisa pivotally, it is a wheel On both sides of axis 5c, wheel 5d with a tire, 5d are installed. In addition, A wheel Motor 5e with a brake goes through deceleration mechanism, and is coupled with axis 5c, it is *mo* Axle 5c and wheel 5d, 5d rotate by means of drive of *ta* 5e. Wheel 5d, 5d Is received to ha, rail 4 , by this, storing case 5a is a television receiver Faceplate of *shin* airplane 1 is turned to a passenger, and it becomes hang to rail 4.

[0008]

In addition, Between rail 4 and axle 5c, current collecting device (not shown) is installed and It is positive in motor 5e by means of ri, operation of switch disposed a short time ago by three seat around column It is

assumed that direction or a reverse direction can control. In addition, Anchoring department of rail 4, of the inside of car It is covered by means of trim 8 for ceiling not to lose a look. Transportation case 5 is configured as above, it operates as follows.

[0009]

When, storing case 5a which received television receiver 1, television is shown, It is moved to screening lay of FIG. 1, FIG. 2 and driver's seat top to show with a continuous line of FIG. 4. *soshi* When the before and behind note switch that te, the screening were finished is operated, motor 5e rotates positive and, Wheel 5d with a tire installed on either side of axle 5c, 5d rotate, it is rail 4 It goes to the rearward of bath, and *no* is run, it is storing case 5a hung to rail 4 It is *i* in evacuation lay to show in in two-dot chain line of rear figure 1 and figure 2 from *ga* above television screening lay It dosuru. By this, Television receiver 1 received by storing case 5a is *jo* It is moved to lay shown in two-dot chain line of FIG. 4 of the bath rear which is not disturbed in of visibility of a visitor.

[0010]

In addition, When television is shown, it is a locomotive means in lay showing television receiver 1 When a *ku* above switch is operated, motor 5e turns in reverse, and wheel 5d, 5d are bath It runs toward *no* front, it is *ba* which storing case 5a shows in in two-dot chain line of figure 1 and figure 2 Television screening lay to show in in continuous line of FIG. 1 of front and FIG. 2 from the rear evacuation lay It is similar, and *i* dosuru.

[0011]

In addition, Transportation to move statement above television receiver 1 which, in an embodiment, is for bath passengers Case 5 was explained, but, statement above television receiver 1 is not limited to, other , by way of example only *on* cold storage for passenger service may be received, is received by the *on* cold storage It is each seat 3 with the ninth class *kama* beer which cooled, for example, held article as shown in FIG. 5 appropriately It can be distributed to a passenger seating *ni*. In addition, The tooth space which an *on* cold storage was installed in *ga* becomes unnecessary, and there is effect making ship's space of the inside of car spread.

[0012]

[EFFECT OF THE INVENTION]

As discussed above, according to the present invention, it is * in rear in generally center of ceiling of bath from front Storing case and the rhe which rail and the rail which *ri* was installed in could be moved to, and was hung It is *bi* by a drive means it is installed between *ru* and storing case, and to move the storing case Because it was sentenced to got constitution, it is the television which it is fixed to constant locality in a wheel of bath conventionally, and is disposed In front with equipment for passenger service of John receiver or an article of passenger food and drink in the inside of car of bath It can easily move later. Because of this, Of a passenger by equipment for passenger service Visibility disorder is broken off, and convenience of equipment for passenger service can be improved B In addition, Article of food and drink for passengers can be easily distributed to each passenger.